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ABSTRACT

After introducing the financial dilemmas which community colleges face, this paper states the approaches generally advocated for sound community college financing: negotiated budget under full state support, unit rate formulas, minimum foundation funding, and cost-based funding. Criteria related to those principles include: (1) consistency with community college goals, (2) policy perogative of the local authority, (3) objectivity of formula data, (4) protection of the minimum level of quality, (5) administrative budget flexibility, (6) equity and equalization, and (7) accountability to state and locality. Reports of current practices in several states, and some of their strengths and weaknesses are presented; and a more systematic approach to evaluating a state's funding method is proposed. Besides considering the country at large, the paper devotes special attention to Pennsylvania to provide greater specificity and illustration. A survey of Pennsylvania community college presidents indicates a belief that the state's present system of funding is inadequate, and should be improved through increased support for non-resident students, for new colleges and nation- and region-wide programs, for occupational programs in health and engineering, and for minimum foundation levels of educational quality. (MB)

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Principles, Practices, and Alternatives in State Methods of Financing Community Colleges and an Approach to Their Evaluation, with Pennsylvania a Case State

S. V. Martorana
James L. Wattenbarger

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Center for the Study of Higher Education
The Pennsylvania State University

Report No. 32

Principles, Practices, and Alternatives in State Methods of Financing Community Colleges and an Approach to Their Evaluation, with Pennsylvania a Case State

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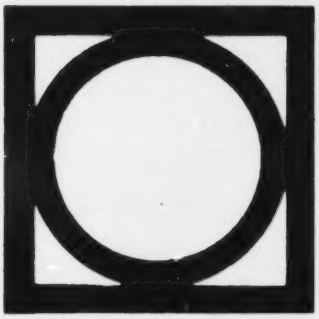

Center for the Study of Higher Education
Report No. 32

The Pennsylvania State University
University Park, Pennsylvania

April 1978

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FOREWORD

The project from which this monograph stems started over a year ago. The entire experience illustrates several of the ways the Center for the Study of Higher Education operates and acts to serve post-secondary education in Pennsylvania and throughout the nation. We are pleased that this service commitment through research and analytical studies was recognized by the Pennsylvania Council of Community Colleges (PCCC) of the Pennsylvania Association of Colleges and Universities (PACU) and that their leaders felt free to request help from the center when they wanted a background paper prepared that spoke to a subject of their interest. Faced with their concern about current policies and practices for financing public community colleges in Pennsylvania, they asked for a review of practices in the several states and of the strength and weakness of their practices.

Dr. S. V. Martorana, Research Associate in the Center, agreed to work on the request and, at his suggestion, arrangements were made with Dr. Jim L. Wattenbarger, Director, Institute of Higher Education, University of Florida, to collaborate on it. They had worked jointly on related projects for many years, with Martorana giving special attention to statutory policies and Wattenbarger the program aspects of community college financing. A committee with college presidents representing the PCCC was named to work with them; their names and institutions are shown in Appendix A.

As Drs. Martorana and Wattenbarger note in their preface, however, the project grew from a compilative and analytical work to a conceptual one as well. How truly and fairly to evaluate various approaches to financing institutions of higher learning is a much argued question, but also one of only limited objective analysis. The suggestion that institutions should be financed in ways that enhance real achievement of purposes for which they were created is a provocative one. We trust that the report will stimulate more attention to it in the research community as well as among trustees and legislators.

Kenneth P. Mortimer
Professor and Director
April 1978

PREFACE AND ACKNOWLEDGEMENTS

This monograph started with a rather straightforward, direct request from the Pennsylvania Community College Commission (PCCC) of the Pennsylvania Association of Colleges and Universities (PACU). The request was for a background paper against which presidents and trustees of community colleges in Pennsylvania could assess the way these institutions are currently financed. The expectation was that a review of practices used in the several states to finance community colleges would result, along with a more penetrating look at those followed in Pennsylvania. Dr. Mortimer develops the history of the request in the foreword. Because of our mutual interest in the topic and our previous work on it, we were pleased to take it on.

As the project proceeded, however, it grew considerably in concept and form. We saw in it an opportunity to do more than a compilative service, looking at the nation and Pennsylvania; the very nature of the request suggested that beyond such a service some rational design for evaluating the relative merits of different approaches used to finance community colleges nationwide ought to be proposed. With the cooperation of the Committee of Community College presidents shown in Appendix A and their larger associations, attention went also to the formulation of such a proposal and the result appears in this monograph. We suggest that it is a start toward an objective that merits more attention and effort. The question, in our view, is no longer whether or not community colleges should be financed (the strength of these colleges makes that academic), but how they can be financed to assure fullest achievement of the purposes they seek to achieve. The rationale herein proposed moves from that basic assumption.

We are grateful to the heads of the Pennsylvania community colleges and their staffs for their help in preparing this work. We are also deeply indebted to the three individuals shown on the title page for the key help they gave: William D. Andres for his work on the fiscal computations; Rose A. Rizzi for assistance in telephone interviews; and especially David C. Nichols, who produced much of the first draft. While acknowledging their excellent essential role in the work, we accept responsibility for the final result, for we are well aware that it is only a limited treatment of a very complicated, large and critically important current subject. To have treated the subject as fully as we would have liked, and as many reviewers of the draft suggested, would have expanded the task beyond our means.

We thank also the invaluable help of the secretarial and editorial personnel at The Pennsylvania State University for the part they played in getting this job done. All concerned at the Center for the Study of Higher Education and with the assistance of Printing Services staff handled all of the logistical and technical tasks and did so, we think, expertly.

S. V. Martorana
J. L. Wattenbarger

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I

INTRODUCTION: THE FINANCIAL DILEMMAS OF THE COMMUNITY COLLEGE

The rapid spread of public community colleges throughout the United States in recent years is one of the dramatic success stories of American educational history. Yet, at the very time when they seem about to reach the idealistic goals of popularizing postsecondary education in this country, they are facing serious setbacks in the financial support needed to maintain their momentum toward those goals. Part of the setbacks is caused by the lack of evaluative, objective review of existing patterns and procedures used in the several states to finance their community colleges. This paper examines the nature of the fiscal dilemmas these colleges face; states the principles generally advocated for their sound financing; develops criteria related to those principles; reviews reports of current practices in the several states and some of their strengths and weaknesses; and proposes a more systematic approach to evaluating a state's funding method. Besides accomplishing this for the country at large, the paper devotes special attention to Pennsylvania to provide greater specificity and illustration to the message it conveys.

In the earliest years of the century, two-year colleges accounted for only a handful of the students enrolled in higher education in the United States. In 1976, three-quarters of a century after the founding of the first community college, two-year institutions are a major segment of the higher education enterprise in the United States. Located in forty-three of the fifty states, some 1,200 community colleges enroll more than one-third (3.7 million) of the 10.8 million college students (including full- and part-time, degree and nondegree credit students).[1]

The rapid growth of the two-year colleges may be attributed, in large part, to the demand by American Citizens for expansion of democratically conceived, low-cost educational opportunities beyond high school. Responding to these demands, community colleges have emphasized open admissions, proximity to population centers, low tuition, and comprehensive programs. Moreover, community colleges have remained sensitive to local needs through a history of local governance. As a result of these efforts, community colleges have made the first two years of higher education available to a greater variety of citizens than any other type of institution. Stressing the twin goals of equality of opportunity and economy, community colleges have strived to develop comprehensive programs, aimed at young and old alike, that range from college transfer programs to vocational training, from programs aimed at self-enrichment to highly structured occupational programs for those who want skills for specific careers. Thus, community colleges have achieved distinction by responding to the interests of the American people in open-door, comprehensive, and economical higher education.

Just as the community colleges have matured in scope and direction as an outcome of their extraordinary expansion in recent years, so have they experienced increasing financial uncertainty in the 1970s as an outcome of pressures on public support to postsecondary education. The community college has achieved distinction at a time when all institutions of higher education are being forced to reassess their priorities in light of the new scarcity of public support.

All postsecondary institutions, two- and four-year alike, have recently undergone serious and repeated waves of self-study and belt-tightening. Relief is nowhere in sight. Because of the leveling off of support from public sources, public institutions have been forced to meet increased costs both through reduction of services and through additional charges to students in the form of higher tuition and fees. As a result, tuition in all types of institutions has been increasing rapidly.

More so than other types of colleges, the community colleges face a special dilemma with respect to increasing their tuition and fees. This dilemma is based on the need to keep costs to students low in order to implement the "open-door" policy characteristically set for these colleges. This policy offers access to students from lower income groups, most of whom are first generation college-goers, who would not attend college at all if the community college was unavailable because of location or costs. Most states recognize this dilemma and have tried to hold the line on tuition increases in the community colleges, if not in the other public institutions. The Carnegie Commission on Higher Education recommends that all states provide two years of postsecondary education through no- or low-tuition community colleges located within commuting distance of virtually every citizen.[2]

Should current high tuition trends continue, the community colleges have reason to fear that one of their basic goals—low-cost education from the student viewpoint—will be undercut, if not negated entirely.

In a few states, notably Pennsylvania, New York, and New Jersey, student tuitions already account for a high proportion of college income compared to the relative contributions of local and state government. More detail is provided on this point in Section III. Fortunately, the impact on students is offset to some extent by state student financial aid programs. In Pennsylvania, this support is provided by the Pennsylvania Higher Education Assistance Agency (PHEAA). At the moment, however, little is known about the disincentives to potential students brought about by the very real barrier of high tuition, regardless of state grant and scholarship aid.

The fourteen community colleges in Pennsylvania reflect the general national situation. Although these institutions started later than those in most other states (Pennsylvania's statute enabling establishment of public community

colleges was passed in 1963, California's in 1907, New York's in 1948), they made rapid strides during the past decade toward the goal of greatly expanded access to postsecondary education for all of the state's citizens. In the fall of 1976, their collective enrollment exceeded 35,000 full-time students, and some 40,000 more were attending on a part-time basis.

Athough this growth is significant, and the commitment to expanding access to further education for all continues, Pennsylvania still lags behind most other states in community college educational development. Even in 1977 the state still has some geographic areas not served with the type of educational programs these colleges provide, and even the existing colleges are unable to implement fully their commitment to the policies of "open-door" admissions, comprehensive program choices for students, and personalized counseling and instruction to which they are philosophically committed. In short, like their counterparts in California, Florida, New York, and most other states, the fourteen community colleges in Pennsylvania are concerned that the gains made in recent years in developing a strong community college system could be seriously eroded without an appropriate plan of financial support by the Commonwealth. Like other states, Pennsylvania, too, shows interest in a reexamination of the financing plan used for community colleges. The discussion in this paper may provide some timely help to them all.

II

GOALS STATED, PRINCIPLES ADVOCATED, AND EVALUATIVE CRITERIA PROPOSED

For community colleges to be effective, the principles used to guide decisions about their operations should be consistent with and lend support to the goals they seek to reach. This is true for decisions concerning methods for providing financial support and for administering the funds provided, as well as for other aspects of institutional operation. At the working level, the colleges prepare budgets on the basis of anticipated needs according to established goals and standards and administer the resources acquired to uphold these expectations. In turn, funding agencies, whether at the local or state level or both, evaluate institutional budgets on the basis of similar notions of goals to be achieved. The purpose of this section of the report is, first, to review and synthesize the goals typically advanced and by which budget standards of community colleges can be formulated; second, to relate these to several principles generally accepted for financing community colleges; and third, to translate these concepts into a set of criteria suggested for use by state funding agencies in evaluating funding plans.

Standard Goals of Community Colleges

The goals of American community colleges have been studied by many between the landmark survey by L. V. Koos (1924)[3] and a recent report by Knoell and McIntyre (1974)[4]. In his pioneering studies in the early part of the century, Koos developed a taxonomy of community college goals:

1. Provide core academic courses of general education, both for transfer and terminal students
2. Give students an opportunity to explore career opportunities before committing themselves to a single career
3. Screen students for the universities and four-year colleges
4. Help to improve the quality of the secondary schools through local leadership and make up for their deficiencies through remediation programs for students
5. Offer programs to uplift the cultural interests of the community

In their recent studies, Knoell and McIntyre identify six program goals for the community college. They stress that community colleges ought to educate "whole persons," and not simply the "labor-force portion" of the person. They list the six goals of community colleges as follows:

1. Community colleges should offer comprehensive programs so that students will have a wide spectrum of choices. This goal aims for innovative liberal arts programs, occupational skills programs, as well as continuing education programs aimed at adult self-enrichment.

2. Community colleges should try to relate student career interests to local, state, and national manpower needs. Commitment to this goal implies continuing assessment of manpower needs, the provision of adequate student counseling services, clear goals for career education, as well as job placement efforts by the college.
3. Community colleges should develop effective "articulation" with other institutions so that students may transfer freely, without penalty, from the community college to four-year institutions.
4. Community colleges should improve access and remediation for poorly prepared students. It is to be expected that many of the students who come to the community college will require intensive remediation to overcome educational deficiencies. Financial support based on a "lockstep" that assumes specified time allowances for each student will undercut these efforts.
5. Community colleges should provide a full range of student personnel services in recognition of the wide, varying needs and interests of community college students.
6. Community college programs should reflect the fact that students have lifelong educational needs and that adequate programs should be offered to both full- and part-time students, young and old alike. Plans of financial aid should encourage, and not penalize, part-time students and should adequately reflect the community's interests for continuing education.

Based on such goals, most community colleges today have built their programs around a distinctive philosophy emphasizing open access, comprehensive programs, with no- or low-tuition. Most community college curricula consist of:

1. A general education component
2. A transfer oriented, university parallel program
3. A developmental or remedial program for students who are poorly prepared
4. Community services and continuing education programs

As a general rule, these elements are also reflected in state plans or laws that define the role and scope of community colleges.

The Master Plan for Higher Education in Pennsylvania (1971)[5] shows conformity to the general view in defining the mission of the community colleges as follows:

1. To provide associate degree programs preparing individuals for various professional, semi-professional, and technical occupations and for transfer to four-year institutions
2. To complement, but not duplicate, the offerings of vocational-technical schools or proprietary schools

3. To serve individuals on both a full- and part-time basis in continuing, developmental, and public service education
4. To provide special educational programs for the region in which the community college is located

In sum, the *Master Plan's* definition of the mission for the fourteen community colleges in Pennsylvania reflects the generally accepted idea of what community college goals should be, suitably tailored to specific circumstances in Pennsylvania.

Principles for Financing

The main theme in the foregoing statements of goals for community colleges is the clear intent that these colleges be a means for expanding access to postsecondary education on a universal plane, reaching all who need and can be helped to further their effectiveness in life by such educational opportunity. Consistent with that general theme and with the specific goals and objectives presented above, a number of guiding principles for financing these colleges can be formulated. These include:

1. Costs to the student should be kept as low as possible
2. Interests responsive to the community served should have a voice in the decisions for use of the monies provided
3. All parts of the comprehensive array of program offerings should be supported in balanced fashion
4. Support essential to provide individualized instruction and specialized student counseling should be available
5. Fiscal mechanics (budget development, fiscal accounting, and reporting) should be kept as simple as possible so not to cause diversion of institutional resources and energies from the primary educational purposes set for them
6. Students should enjoy equity of opportunity for community college education regardless of the relative wealth of the locality in which they reside and its capability to contribute from local tax funds to community college financing
7. Fiscal patterns and procedures should establish a basis for long-range planning and developing of community colleges as well as supporting their immediate institutional needs
8. Considerations of statewide as well as local interests in community college programs of quality need to be enhanced

Criteria for Evaluation of State Financial Plans

From these notions of proper goals for community colleges and principles to guide their financing, it is a short step to set up the basis on which a state's approach to this subject is handled.

History, practice, and educational philosophy suggest seven criteria for evaluating state financial plans for community colleges. These criteria are listed and discussed below.

1. Consistency with the characteristic educational and philosophic goals of community colleges: (a) open access, (b) comprehensive programs, and (c) local voice in governance to assure responsiveness to local area needs
2. Reservation to the administration of the college, including the body responsible for the local voice in governance, of the authority and duty to set academic policy for the institution
3. Objectivity in determining the magnitude (or weight) of value to be assigned the factors used in the financial plan, including the availability, reliability, and validity of data for evaluating support formulas
4. Protection of a minimum foundation level of quality of programs and services provided
5. Non preemption of policy prerogatives of local authority to administer the budget once approved; flexibility in administration and management; and use of the fiscal support provided for the college
6. Equity among local tax jurisdictions sponsoring and supporting community colleges
7. Accountability to the supporting agencies and the public at large

First, a state financing plan for community colleges must be consistent with the characteristic educational and philosophic goals of the colleges. Open access, comprehensive programs, and local voice in governance to assure responsiveness to local community needs are three of the main goals to be considered. Open access may be defined as the opportunity for all persons who are high school graduates, or are over eighteen years of age, to be admitted to public community colleges if they are capable of benefiting from continuing education. Most state-level planners agree that community colleges should follow an open-enrollment policy, while access to four-year institutions may be more selective. Community colleges thus offer a key entering point to the provision by a state of universal, postsecondary educational opportunities.

To provide adequately for the educational interests of local citizens, community colleges have tried to offer comprehensive programs. There is general agreement that community colleges should provide a broad range of options for adult students of all ages, including university parallel, lower-division, transfer education; general education; developmental and corrective developmental courses; vocational-technical, occupational programs; continuing education; cultural programs; and other community services designed to enrich the local community.

State financial plans also should reflect the historic emphasis on high and timely responsiveness to local area needs best assured by a strong local voice in

the governance of community colleges, not to the exclusion of appropriate statewide coordination but to allow for vital local determination. Early junior colleges often were housed in a wing of the local high school and were supported entirely through local property taxes. In recent years, however, there has been a strong trend in many states toward state funding accompanied by state coordination. The Carnegie Commission has warned against further state-level controls over local community colleges, arguing that such controls are contrary to the goal of local governance.

Of the fourteen community colleges in Pennsylvania, six are sponsored by county governments, one by the city of Philadelphia, and seven by local school districts. Clearly, local governance is an important consideration in the current financial support plan to community colleges in Pennsylvania.

The second criterion to evaluate state financing plans is the level of assurance it provides to the responsible institutional functionaries (board of trustees or other agency for local voice in governance, administration, and faculty) to set basic academic policy. State plans that impose over-standardization and exert inhibiting state-level fiscal controls will tend to violate this criterion and stifle local initiative. While apparently tied only to fiscal policy, such rules and regulations often have subtle effects that influence basic academic policies generally believed to be the prerogative of individual colleges. Whether or not money budgeted for instructional support within an institution should be used to enrich and diversify modes of instruction, for example, or be spent to establish a program of faculty staff development, should be a matter settled by institutional policy rather than by a requirement of fiscal funding agency (state or local), which establishes a rigid classification of approved objects of expenditure and forces adherence to them by the community colleges.

The third criterion concerns the degree of objectivity in determining the weight to be assigned to the various factors used in the financing approach, which are vital to related budgetary decisions. Data used to determine a funding formula must lend themselves to hard tests of objectivity, availability, reliability, and validity. Funding formulas based on numbers of students enrolled or student-credit hours produced in a college require common definitions of such terms and consistency in their application; academic programs, similarly, need specific definition if they are to be the base for funding. Some programs, such as occupational programs, are more costly to operate than others.

Fourth, programs and services must be assured a minimum foundation level of quality through adequate fiscal support. There are several generally recognized measures of collegiate institutional quality, including faculty/student ratios, counselor/student ratios, a percentage of budgets for libraries, adequacy and availability of student financial aid, and variety of instructional approaches afforded to students.

A very real and sometimes unrecognized hindrance to quality teaching in the community college is the heavy teaching load commonly carried by the faculty. A fifteen-credit hour teaching load is commonplace in community colleges compared to the maximum twelve-credit load for faculty in baccalaureate and higher degree granting institutions. The heavy teaching loads of community college faculty tend to undermine efforts to assure instruction of high quality, and consideration of this effect should be given weight in criteria for a minimum foundation of program quality.

Fifth, the policy prerogatives of local educational authorities to administer the budget once approved should not be preempted. This criterion is related to the second but carries a different emphasis. Rates of expenditure, modes of fiscal accountability and control, and similar matters in the administration of financial affairs should be institutionally determined as much as possible. This criterion is violated by rigid line item budgeting; within broad parameters set by state statutes, funds budgeted for one object of expenditure should be transferrable to other budget categories on the sole approval of the local boards of trustees. State or local regulations that force a preaudit of expenditures provided for in the approved budgets of community colleges by agencies outside the college tend to stifle institutional initiative, add additional and costly layers of bureaucratic control, and are generally viewed as lessening rather than increasing academic quality.

Sixth, to the extent that a state's plan calls for local participation in financing, there should be equity among local tax jurisdictions sponsoring and supporting community colleges, as well as equalization of opportunity for students to attend these colleges. To achieve tax equity, local bodies supporting community colleges ought to be able to exceed the minimum level of support if they are fiscally able and wish to do so, while others with less fiscal strength should not be forced to unreasonable levels of effort to support minimally acceptable programs. In short, expectations of support should be related to the available taxable wealth of the locality.

Seventh, financial plans should provide adequate—but not stifling— provisions for accountability between the college and the several major sources of fiscal support—state, local, and student. At the state level, policy should require that such accountability is rendered, not only to the state, but also to the other two interests identified (local and student). In these cases, however, the specific policies guiding implementation of the accountability requirement should be set at the local level. Reasonable and just levels of accountability may be achieved through reporting procedures that fairly reflect campus workload and productivity without imposing additional layers of bureaucratic red tape and cumbersome operating procedures.

These seven criteria can be used by state-level sponsors, local sponsors and governing bodies, and by the institutions themselves to evaluate existing

approaches and new proposals for financial support. Those approaches that honor or relate positively to these criteria will prove strongest in moving community colleges to achieve their goals; those that violate the criteria, it is believed, will be relatively less effective. Effectiveness of financing plans, in short, works in direct relationship to the degree they adhere to or depart from the directions indicated when the seven criteria described above are used.

III

FINANCING PRACTICES IN THE SEVERAL STATES

Repeated studies show that the fifty states vary greatly in the way they provide fiscal support to community colleges. Despite this fact, however, some common patterns can be isolated and described. Both the variety of approaches and some most often used are identified and discussed here.

Methods of Support

Wattenbarger and Starnes (1976)[6] surveyed thirty-four states to determine a typology of model methods of public support to public community colleges. They point out that, while current practice differs markedly from state to state, there are enough similarities to develop a simple taxonomy consisting of four funding patterns: (1) the negotiated budget under full state support: (2) the unit-rate formula; (3) minimum foundation support; and (4) cost-based program funding. These methods are discussed below.

1. Negotiated budget under full state support refers to the practice in the states in which community colleges are fully state supported by negotiating annually or biennially for funding without the use of explicit formulae. In these states—Connecticut, Delaware, Idaho, Kentucky, Maine, Massachusetts, Rhode Island, Utah, Vermont, and Virginia— detailed budgeting is the basis for state allocations to institutions. Representatives of the colleges typically negotiate directly with a state legislature or a state board. As a rule, negotiated budgets require analysis and approval of each college's budget, sometimes line-by-line. None of the states included here reported revenue from local tax districts. Some other states go through somewhat similar budget negotiations but qualify for inclusion in the other categories.

Full-state support is supposed by some to bring about complete equalization of educational opportunity. However, equalization depends on adequate state support as well as the methods used to develop and negotiate budgets. The negotiated budget allows a high degree of accountability between the institution and the state. On the other hand, negotiated budgeting may encourage the tendency toward state control, especially under full state support.

2. Unit-rate formulas are based on some defined unit, such as units of instruction, enrollment, student credit hours, or other output measurement. Unit-rate formulas follow a flat grant method of allocating funds. In the simplest instance, the college's grant is computed at a single funding rate for the measures used applied to the entire college. In other instances, however, funding rates are differentiated according to such factors as type and level of instruction, type of college, or enrollments.

Since unit-rate formulas trigger flat grants, funding does not vary with respect to the taxpaying ability of the local district. In some instances a minimum local tax levy is required for eligibility to receive the state grant, but the rate amount is uniform statewide. In several states—Maryland, Missouri, New Jersey, New York, and Pennsylvania—there is a maximum grant limit, a ceiling on the total funds allocated to a college, which is stated in terms of a percentage of the college's operating expenses.

Other states using unit-rate formulas are Alabama, Alaska, Colorado (the locally controlled colleges), Kansas, Mississippi, Nebraska, North Dakota, Ohio, Oklahoma (one locally controlled college), and Oregon.

Alaska and Kansas allocate funds to their colleges at $1 per credit hour rate. All the other states using the unit-rate formula allocate funds at dollars per full-time equivalent ($/FTE) student. Alabama and Mississippi use a college site funding grant, which is the same amount for each of the colleges, and to this they add their $/FTE. Among the states, funding rates vary depending upon curriculum. For example, in Colorado, Ohio, and Pennsylvania, the rate for vocational education is higher than the rate for general education. In Oregon, the formula differs according to the number of FTE students, which, in effect, provides different levels of funding for small and large colleges.

The best aspect of unit funding is that it allows for local control of budgets. On the other hand, this method provides for limited institutional accountability in effectiveness or efficiency. Moreover, the unit method, by itself, does not provide for equalization of educational opportunity. However, as the percentage of state support increases while local support decreases, the level of equalization may become higher.

(3) Minimum foundation funding refers to a state-guaranteed minimum level of support per student, based on both local and state funds. As a rule, the state support is computed at a variable rate dependent upon the amount of local tax funding available, at a prescribed minimum millage levy. The state makes up the difference between the amount of local support and the established minimum standard. Minimum foundation funding is used in Arizona, California, Illinois, Michigan, Montana, New Mexico, Wisconsin, and Wyoming. The specific methods used for funding by this formula differ somewhat from state to state.

According to Wattenbarger and Starnes, minimum foundation funding encompasses equalization funding. However, a major deficiency in the method is that only when student fees and assessment of property valuation are uniform will statewide equalization occur. Furthermore, under this method there are no incentives for promoting quality. In contrast, minimum foundation funding typically does provide for a high level of local control.

(4) Cost-based program funding refers to the allocation of state funds on the basis of analyses of actual program costs. These studies usually are carried out both at the state and the campus level.

Of the fifteen states using this method, ten have no local tax support for the community colleges. The ten are Arkansas, Florida, Georgia, Hawaii, Louisiana, Minnesota, Nevada, Tennessee, Washington, and West Virginia. All ten are fully state supported.

Community colleges in five states—Iowa, North Carolina, Oklahoma, South Carolina, and Texas—receive a small proportion of their support from local taxes, but state support is calculated on the basis of program costs. In these states, local funding is independent of state funding.

Cost-based funding has high potential for equalization when costs are accurately assessed statewide and are fully funded. The potential for accountability is also very strong. On the other hand, there is a danger that funding based on statewide average costs could discourage efficiency because lower costs result in lower funding levels. Moreover, the cost-based model may also encourage increased state controls unless institutional rules in policy decision making are carefully protected.

Sources of Community College Support

Information showing the sources of community college funds for operations is shown in Table 1. Note that this listing is of all states regardless of their approach to community college funding. The following discussion portrays the national scene. Observations about a given state should be balanced against how it is like or unlike the others in the nation. On such a basis, for example, states that require local government's participation in (county, school district, city) financing and that do not give the college board of trustees taxing authority can be viewed as a comparable group. it would include Maryland, New Jersey, New York, and Pennsylvania.

Of the thirty-four states surveyed by Wattenbarger and Starnes, Pennsylvania and Ohio community colleges collect a higher proportion of their operating support through student tuition and fees than any of the other larger state systems. In 1975-76, student tuition accounted for 31.6 percent of the income of Pennsylvania's community colleges, compared to 33 percent in Ohio, 26 percent in New Jersey, 29 percent in New York, 23 percent in Florida, and 20 percent in Missouri. In most of the states surveyed, student tuition accounts for well under 20 percent of community college income: Illinois, 17.8 percent; Arkansas and Mississippi, 14 percent; South Carolina, 15.8 percent; and Wisconsin, 11.2 percent.

According to surveys conducted by the National Commission on the Financing of Postsecondary Education, over the ten-year period from 1961-62

TABLE 1

SUPPORT OF CURRENT OPERATIONS IN STATES REPORTING 1975-76, BY SOURCES OF FUNDS (IN PERCENTAGES AND TOTAL AMOUNTS)

State	Federal Funds %	State Appro-priations %	Local Dist. Tax %	Tuition & Fees %	Gifts & Other Sources %	Total %	$
Alabama	16.73	47.92	–	18.66	16.69	100	44,795
Alaska	–	78.80	–	15.91	5.29	100	9,391
Arizona	.85	42.45	47.47	3.25	5.99	100	69,759
Arkansas	2.29	80.64	–	14.51	2.26	100	9,113
Colorado							
State	3.83	76.01	–	20.16	–	100	26,350
Local	3.01	45.00	35.06	17.00	–	100	9,051
Connecticut	9.20	79.54	–	11.17[a]	.08	100	26,443
Delaware	3.27	89.78	–	6.95[a]	–	100	10,698
Florida	5.35	71.11	–	23.25	1.22	100	214,930
Georgia	–	73.83	–	25.44	.72	100	27,467
Hawaii	18.71	78.27	–	–	3.01	100	22,074
Illinois	2.30	38.22	37.29	17.82	4.37	100	210,878
Indiana	6.09	51.41	1.29	33.04	8.18	100	5,880
Iowa	20.12	48.06	9.33	19.30	3.20	100	74,520
Kansas	1.70	29.36	54.92	14.02	–	100	32,975
Kentucky	13.18	53.50	–	33.32	–	100	13,481
Maryland	10.93	35.62	27.28	24.39	1.81	100	105,510
Minnesota	9.39	67.56	–	22.37	.68	100	35,934
Mississippi	10.08	56.13	15.77	14.06	3.95	100	48,000
Missouri	10.00	30.01	42.00	20.00	–	100	60,000[e]
New Jersey	–[b]	31.05	38.32	25.80	4.86[c]	100	102,556
New Mexico	4.79	30.98	30.67	30.87	2.67	100	7,366
New York	–[b]	36.73	30.34	28.71	3.58	100	226,498
North Dakota	No funds or tax information submitted on Survey Form						
Ohio	–	33.41	33.29[e]	33.29[e]		100	69,082[e]
Oklahoma	–	67.04	11.48	16.91	4.57	100	25,819
Oregon	2.75[e]	97.25	–	–	–	100	32,947[e]
Pennsylvania	4.19	34.55	24.38	31.60	5.41[d]	100	83,620
Rhode Island	1.81	71.85	–	17.15	9.97	100	12,731
S. Carolina	18.77	51.49	7.33	15.82	6.59	100	47,918
Tennessee	3.44	68.26	–	18.12	10.13	100	23,435
Utah	3.70	73.38	–	18.00	4.92	100	14,444
Washington	12.02	77.01	–	(Combined =	10.97)	100	131,962
W. Virginia	6.42	61.81	–	28.55	3.20	100	6,900
Wisconsin	8.14	25.89	54.78	11.19	–	100	116,630
Wyoming	–	59.59	26.36	11.75	2.30	100	34,065
Puerto Rico	.63	99.07	–	–	.29	100	16,660

NOTES:

[a] Tuition and fees are returned to the state general fund

[b] "Federal Funds" are included with "Gifts & Other Sources"

[c] Includes "Federal Funds"

[d] Includes some federal funds

[e] Estimates

Source: James L. Wattenbarger and Paul M. Starnes, *Financial Support for Community Colleges, 1976* (Gainesville, Fla.: Institute for Higher Education, University of Florida, 1976).

to 1971-72, tuition at two-year colleges as a percentage of fund income increased from 9.2 to 14.3 percent.[7] The more recent data summarized above show that the trend toward higher tuition has accelerated nationwide among community colleges. Nevertheless, Pennsylvania and a few other states gain a disproportionate amount of their community college income from tuitions.

Compared to many other states in proportion to state appropriations for college operations, Pennsylvania community colleges rank low, especially among the larger state systems. In Connecticut the state pays 79 percent of the operating costs of community colleges; Florida, 71 percent; and Mississippi, 56 percent. Pennsylvania's community colleges, with 34.5 percent of their income from state funds, rank along with New York, 36.7 percent; New Jersey, 31 percent; and Ohio, 33 percent.

Local district taxation accounts for 54.8 percent of college operating support in Wisconsin, 47.5 percent in Arizona, 42 percent in Missouri, 38 percent in New Jersey, 33 percent in Ohio, 30 percent in New York, and 24.4 percent in Pennsylvania. Thus, among the states reporting local support in their funding, Pennsylvania ranks relatively low in the proportion of support to community colleges coming from local district funds. Since state appropriations are also relatively low in Pennsylvania, it appears that Pennsylvania taxpayers have shifted a relatively high proportion of the burden of operating their community colleges onto the shoulders of the students through higher tuitions.

In only a few states do federal funds account for a very high proportion of operating income for community colleges. Community colleges in Alabama currently are receiving 16.7 percent of their income from federal sources; Iowa, 20 percent. In Pennsylvania, only 4.2 percent of college operating funds come from federal sources. Comparable figures are not available for New York, Ohio, and New Jersey.

Support for Capital Outlay

Contrary to the wide variation of practices among the several states in financing current operations of community colleges, their approaches to financing capital costs are much less varied. Most of the fifty states can be grouped quite easily into four basic categories: (1) states meeting capital costs totally from state funds; (2) those making it a joint state and local obligation with the state carrying the greater share (more than 50 percent); (3) those requiring the locality to carry more than the state; and (4) those placing all of the burden at the local level. As shown in Table 2, Wattenbarger and Starnes, with 28 states reporting, found the number of states falling in each of these categories to be respectively, 11 (12 if Colorado is included here), 5, 3, and 2. Only two states, New York and Pennsylvania, are shown using a 50-50 division of local and state funds.

In the survey conducted by Wattenbarger and Starnes, eleven states paid 100 percent of capital outlay for community colleges. Those states were Alabama,

TABLE 2

SUPPORT FOR CAPITAL OUTLAY IN STATES REPORTING 1975-76, BY SOURCES OF FUNDS (IN PERCENTAGES AND TOTAL AMOUNTS)

State	Federal Funds %	State Appro-priations %	Local Dist. Tax %	Tuition & Fees %	Gifts & Other Sources %	Total %	$
Alabama	–	100	–	–	–	100	5,443
Alaska	–	100	–	–	–	100	670
Arizona	.53	46.03	15.38	–	38.07	100	15,660
Arkansas	–	–	100	–	–	100	467
Colorado							
State	–	100	–	–	–	100	763
Local	2.86	44.64	35.00	17.14	–	100	280
Connecticut	–	100	–	–	–	100	8,901
Delaware	15.47	84.53	–	–	–	100	2,903
Florida	–	100	–	–	–	100	30,754
Hawaii	–	100	–	–	–	100	18,429
Illinois	–	63.80	36.20	–	–	100	55,250[e]
Indiana	17.77	63.89	–	–	18.33	100	1,429
Iowa	–	–	100	–	–	100	8,561
Kentucky	–	100	–	–	–	100	11,200
Maryland	–	50	50	–	–	100	21,038
Minnesota	–	–	–	–	–	–	–
Mississippi	18.52	–	74.07	6.48	.93	100	5,400
Missouri	–	–	–	–	–	–	–
New York	–	50.00	50.00	–	–	100	107,336
Ohio	–	100	–	–	–	100	17,711
Oklahoma	–	97.35	.57	–	2.08	100	7,012
Oregon	–	100[f]	–	–	–	100	12,000[f]
Pennsylvania	–	50.00	50.00	–	–	100	20,200
Rhode Island	–	100	–	–	–	100	3,650
S. Carolina	34.92	41.82	23.28	–	–	100	11,758
Tennessee	–	100	–	–	–	100	3,540
Utah	–	100	–	–	–	100	14,468
Washington	–	93.55	–	(Combined ·	6.45)	100	31,000
Wisconsin	9.18	20.35	70.48	–	–	100	21,240
Wyoming	–	46.96[g]	53.04	–	–	100	17,305
Puerto Rico	–	59.34	40.66	–	–	100	1,333

NOTES:

[e] Estimates

[f] This is a 1975-76 biennial appropriation

[g] This appropriation was labeled "Mineral Royalties"

Source: James L. Wattenbarger and Paul M. Starnes, *Financial Support for Community Colleges, 1976* (Gainesville, Fla.: Institute for Higher Education, University of Florida, 1976).

Alaska, Connecticut, Florida, Hawaii, Kentucky, Ohio, Oregon, Rhode Island, Tennessee, and Utah. In addition, Colorado does so but only for one of the two types of community colleges in that state.

In Arizona the state paid 46 percent of the capital costs while local taxes accounted for 15 percent (the difference is made up through "gifts and other sources" – a source of funds not heavily reported by community colleges in any other state).

In a few states federal sources accounted for a substantial part of the capital outlay. These states and the percentages of federal support were South Carolina, 31.5 percent; Mississippi, 18.5 percent; Delaware, 15.5 percent; and Wisconsin 9.2 percent.

IV

STRENGTHS AND WEAKNESSES OF THE FUNDING METHODS USED

In Section I of this paper, seven criteria were listed for use in evaluating state financing plans for public community colleges. In this section, each of these criteria is used to describe more specifically the most often used plans in the various states and to make some judgments about their relative efficacy. Although admittedly subjective, the judgments made by the authors of this paper are based on a total of more than sixty person-years of direct experience in dealing operationally with community college financing in states throughout the nation and studying analytically the different state approaches to such funding.

The procedure followed was, first, to judge the level to which the particular financing pattern, according to the best information available concerning its use, tends to support positive community college action on the criterion being applied; and, second, to translate this level of support to a numerical value simply totaled. The result provides a rough index of the relative reinforcement the funding patterns provide to community college action to reach their goals. The data so developed are shown in Chart 1, "Evaluation (Strengths and Weaknesses) of Methods Used to Finance Public Community Colleges." Using this approach, we now examine how the four different approaches to community college financing relate to each of the criteria listed.

Consistency With Community College Goals

Minimum foundation and cost-based funding are clearly seen to give stronger support to community college goals of student access, comprehensiveness of programs and services, and assurance of effective local voice in determination of college policies and governance. With respect to this last goal, the strongest method appears to be the unit-rate formula, because it provides a flat state grant to the institution based on certain units of quantity, *e.g.,* FTE students. The method ranking second in strength is the minimum foundation approach, while the weakest is full state support, because full state support tends to undercut local authority.

Policy Prerogative of the Local Authority

The unit-rate formula scores strongest on this criterion, followed by the minimum foundation and cost-based funding approach. Negotiated budgeting allows the least amount of local policy prerogatives; this is of course, a reflection of the fact that in this method full state support usually exists.

CHART I

EVALUATION (STRENGTHS AND WEAKNESSES) OF METHODS USED TO FINANCE PUBLIC COMMUNITY COLLEGES

Evaluation Criteria	Negotiated Budget: Full State Support	Unit-Rate Formula	Minimum Foundation	Cost-Based Funding
1. Consistency with C.C. Goals				
A. Open Access	W/1	M/3	S/M/4	M/3
B. Comprehensiveness	W/1	M/W/2	S/M/4	S/5
C. Local Voice in Governance	W/1	S/5	S/M/4	M/3
2. Policy Prerogative of Local Authority (Local ability to make initial decisions)	W/1	S/5	S/M/4	S/M/4
3. Objectivity of Budget Development or Formula Data	W/1	S/M/4	S/M/4	S/5
4. Protection of Minimum Levels of Quality	M/W/2	W/1	W/1	M/3
5. Flexibility in Budget Administration	W/1	S/5	S/M/4	S/M/4
6. Equity and Equalization (among local support units)	S/5	M/3	S/5	S/M/4
7. Accountability				
A. To State	S/5	W/1	M/3	S/5
B. To Locality	W/1	S/M/4	M/3	S/M/4
(Overall Index)	19	33	36	40

Key:		(VALUE)
S=	Strong	5
S/M=	Strong to Moderate	4
M=	Moderate	3
M/W=	Moderate to Weak	2
W=	Weak	1
0=	No applicability	0

Objectivity of Formula Data

One of the strong outcomes of cost-based funding is a more precise management-information system and a set of definitions of programs, cost allocations, and accounting procedures. This fact produces the strongest rating for this approach when objectivity of the information going into budget decisions is the aim.

Unit-rate formulas and minimum foundation funding score strong to moderate on this criterion, and the negotiated budget approach scores weakest.

Protection of Minimum Level of Quality

None of the funding methods scores very impressively with respect to this criterion. However, cost-based funding offers some potential in this respect. The real difficulty here is to gain agreement among the affected parties on the meaning of "quality" in education. Despite the fact that regional accrediting associations like the Middle States Association and other authoritative sources advance "standards" believed to be necessary to assure minimum levels of quality in programs and services, these have not yet been translated effectively into operational fiscal requirements. Cost-based funding may lead the way to more progress in this regard.

Administrative Budget Flexibility

The unit-rate formula is the strongest under this criterion since the state simply provides a flat grant to the college. For the same reason, full state support gets the lowest score under this criterion, with the other two approaches both getting strong to moderate ratings of effectiveness in support.

Equity and Equalization

Full state support offers the greatest potential for providing equalization among taxing jurisdictions for the obviously simple reason that all local jurisdictions are equally and totally relieved of the burden to support community college education. In contrast, unit-rate formulas provide the least equity because some states using this approach, like Pennsylvania, have no factor whereby state effort helps level off local differences in taxable wealth.

Accountability to State and Locality

The ratings assigned to the four funding patterns in this criterion reflect the degree of controlling influence and authority to impose fiscal reporting requirements possessed by the state and local authorities. Negotiated budgeting and cost-based funding offer the greatest potential for accountability to those authorities at the state level. Cost-based funding and unit-rate formula budgeting

are seen to merit a strong to moderate rating in support of accountability to the local level. Here, however, the negotiated budget shows a very weak, and in many states virtually nonexistent, position.

Overview of Four Methods

By determining the total values for each of the four funding plans, as shown in the bottom of Chart I, the relative effectiveness of each plan to support community colleges when all criteria are in mind is established. The negotiated budget rates a total score of 19; the unit-rate formula, 32; the minimum foundation method, 36; and cost-based budgeting, 40. Thus, by these particular criteria, the cost-based method scores highest as the most advantageous method of state funding, followed quite closely by the unit-rate and minimum foundation methods of support, which have comparable total ratings one to the other. Clearly weakest in terms of the criteria is the negotiated budget under a plan of full state support.

These values are meaningful, however, only to the extent that the criteria advanced here are acceptable to college, state, and local sponsors. Doubtless state agencies would assign higher values to state coordination than would local sponsors of the colleges. Thus, the information and analysis shown in Chart I are useful to the extent that they serve to help various interested parties see the range of policy choices in light of personal and organizational values. It appears that there are discernable and important differences between the most and least advantageous methods, but when negotiated budgeting is set aside, all the funding methods seem to serve well in terms of the overall functioning of the community colleges.

Level of funding, therefore, seems to be the more critical element, not method. There are, moreover, a series of tradeoffs between local and state-level authority and control. These should be studied carefully by the various parties in a state examining its plan of support. Furthermore, the criteria show up one grave weakness of all the methods of support: program quality maintenance. The fact that none of the methods has a built-in set of qualitative protectors, but that instead all are based on quantitative measures, shows up very clearly in this analysis. This observation raises questions about what may be done to correct this condition and who is responsible to do it.

V

COMPARISON OF THE PENNSYLVANIA APPROACH WITH OTHERS

The funding method used in Pennsylvania shares the strengths and weaknesses inherent to unit-rate funding. The analysis in the previous chapter, based on certain specified criteria, shows that the unit-rate method ranks slightly below the minimum foundation and cost-based funding among all four funding methods. At least theoretically, Pennsylvania's fourteen community colleges should enjoy the strengths of unit-rate funding, as follows: (1) a strong local voice in governance of the colleges; (2) a high degree of budget flexibility at the college level; (3) at least a moderately strong objectivity of data used in making up the funding formula; and (4) strong policy prerogatives at the local level.

On the other hand, the Pennsylvania community colleges, at least theoretically, are weak in terms of the disadvantages of the unit-rate funding method, as follows: (1) weak protection of a minimum standard of program quality; (2) weak tax equity among local jurisdictions affecting equalization of educational opportunity; and (3) relatively weak accountability to state-level interest and authority.

Any changes contemplated in Pennsylvania's funding plan should seek to maintain the strengths inherent in the unit funding approach while minimizing the inherent weaknesses.

The unit-rate formula in Pennsylvania operates according to Act No. 173 of 18 July 1974. It provides that the Commonwealth shall reimburse a community college in an amount equal to one-third of its operating costs, not to exceed $1,500 per full-time equivalent (FTE) student, multiplied by the number of FTE students. In addition, the Commonwealth pays $150 for each FTE enrolled in terminal, nonliberal arts programs.

There are some variations, state-by-state, among those states using the unit-rate method of funding. Those states most similar to Pennsylvania in the maximum level of state support per FTE are Maryland, Missouri, New Jersey, and New York. Three of these states (Maryland, New Jersey, and New York) are directly comparable to Pennsylvania for two other reasons: (1) all require local *sponsorship* of a community college by local governmental jurisdictions, which can impose taxes on their citizens; and (2) all, as a consequence, have community college boards of trustees without taxing power and, so, are fiscally dependent on other agencies at the local level.

How the unit-rate formula works in the states using it is summarized below by first examining the four with the maximum level of state support.

Unit Rate States

Maryland

State funds are allocated to the colleges in districts having a population of 50,000 or more at the rate of dollars per FTE ($/FTE) that equates to 50 percent of college operating expenses, but the $/FTE student rate may not exceed a maximum rate of $700/FTE. Allocations to regional colleges serving several subdivisions, with less than 500 FTE students in a district of less than 50,000 population, are made at a $/FTE student rate that equals 55 percent of the college's operating expenses, up to a maximum of $1,100/FTE.

An additional requirement for state funding is that local funds provide 28 percent and tuitions 22 percent of the income of colleges in the first category, above, while institutions in the second category should receive 28 percent of their income from local funds and 17 percent from tuition.

The funding rate for the small colleges was changed in 1976 to require the counties in which they are located to pay more of the costs and to reduce the share born by student tuition.

Missouri

In Missouri the state allocates funds either at 50 percent of actual college operating expenses, or at a set $/credit hour student maximum rate, whichever is less. However, there is a minimum $/credit hour student rate at which funds are allocated if 50 percent of expenses should not equate to at least the minimum rate.

New Jersey

State funds in New Jersey are allocated for 50 percent of college operating expenses if the allocation does not exceed an amount equal to the state established maximum $/FTE rate. In 1976, the rate was $600/FTE. A new funding method, based on differential funding levels for health and engineering technology programs, has been proposed to the New Jersey legislature.

New York

Basic state aid in New York is divided into two categories: (1) non-full opportunity colleges and (2) full opportunity colleges. Basic state aid for non-full opportunity colleges is the lesser of either 33-1/3 percent of net operating costs after other revenues are deducted, or the sum of a formula that includes faculty/student ratios, the mill of full valuation of real property in the tax district, and a factor of support for disadvantaged students. For full-opportunity colleges, the funding rates are increased to 40 percent of the total derived from the above

considerations. This basic aid plus supplemental aid for technical programs, approximating $150/FTE, becomes the total aid for the colleges. New York also has a mandatory "charge back" provision to help students attend community colleges outside their home areas. Counties where students reside are automatically charged the local sponsor share of the costs of operating the college attended by the student.

Ten states employ the unit-rate method without using a maximum limit of state support. These states are Alabama, Alaska, Colorado (the locally controlled college), Kansas, Mississippi, Nebraska, North Dakota, Ohio, Oklahoma, and Oregon. Each of these states, with the exceptions of Alaska and Kansas, allocate funds at one or more $/FTE rates. Both Alaska and Kansas allocate their funds at a single $/credit hour rate, while Alabama and Mississippi use a college site funding grant, which is the same amount for each of the colleges, plus the $/FTE funding. The funding rates in the states vary in number from one to six, and in the states where multiple rates are used, some allocation variable is specified for calculating the total funding amount.

When Pennsylvania's formula for unit funding is compared to these states, it suggests an almost infinite number of possible variations on the basic approach, which, nevertheless, is basically similar from state to state. Certain variables may be weighted differently to reorder the colleges' priorities, using state dollars to provide leverage.

A Survey of Community College Presidents and State Education Department Officials in Pennsylvania

To determine the strengths and weaknesses of the current funding method in Pennsylvania, the authors surveyed the presidents of Pennsylvania's fourteen public community colleges and a number of officials in the State Department of Education. A combination of mailed questionnaires and telephone interviews based on the criteria discussed in Chapter I was used to do this.

Community College Presidents

The results of this survey show that Pennsylvania's community college presidents believe that the state's present system of funding the colleges is inadequate in several respects; weaknesses were seen both in the total dollars of support and in the ways of distributing those funds. On the one hand, the presidents believe that the amount and proportion of state aid should be increased; on the other, they do not favor changes in the basic approach that would encourage greater state control. The presidents, moreover, strongly believe that the amount of state aid provided for high-cost occupational programs is inadequate. More specifically, the presidents responded that:

1. The present funding method is consistent with the aim of open access, especially for full- and part-time students who reside in the district. But the presidents are overwhelmingly dissatisfied with the current method of providing support for students coming from outside the community college district. In addition, the presidents believe that more should be done by the state to help provide "start up" funds to the colleges for new programs or for additional fiscal support to the colleges when serving statewide or regional needs. Dissatisfaction with the current procedures for establishing new programs is reported to be exacerbated by the use of federal vocational education monies which are provided for the start up of new programs (up to three years) but are then terminated. Evidently, more flexibility is needed in this policy to allow programs, in some cases, more time to take hold.

In program comprehensiveness, most of the presidents give high marks to current support of liberal arts and general education programs; but the presidents believe that the current state support for occupational programs is woefully inadequate.

With regard to the need to protect local control of community college governance, most of the presidents felt that the current method of support by the state provided satisfactory safeguards.

2. Under the present policies and procedures for funding and fiscal accounting and reporting, there is virtually total control by the local college authorities over educational policy matters. Little or no threat to the prerogatives of the institutions were reported in this regard. Clashes of state or local sponsor fiscal policy with college academic policy, as are known to exist in other states, are not yet in evidence in Pennsylvania.

3. With regard to objectivity in determining the weight to be assigned formula factors in financing, the presidents are, in the main, highly satisfied with the definition and the ways of determining FTE students in the current approach. In contrast, as a group, they are not equally satisfied with procedures and data used to determine what an "occupational/terminal program" is; such a definition is required to administer the special state support for their programs. Currently this is done by pooled judgments of a statewide committee of community college deans of occupational programs and business officers along with State Education Department officials. The recommendations this group advances are acted on by the State Board of Education and are used to determine the eligibility of colleges for the special state aid.

4. To protect a minimum foundation level of quality, the presidents believe that the current approach is satisfactory with respect to the ratio of students to faculty; however, they are divided in opinion about the current system's effectiveness in encouraging good practice in other criteria such as the ratio of students to counselors, to library staff, and to other instructional media support

staff; and the percentage of the budget going for libraries, other instructional media, and student personnel services. The presidents are dissatisfied with the current method of support for student financial aid, community services, special programs for the disadvantaged, and state aid as an incentive to local program enrichment.

5. In protecting the preregatives of local authorities to administer the budget once approved, the presidents rated the current method high. Ability to transfer state funds from one category to another with the approval of only their local boards is seen as an advantage. They are concerned, however, in some instances about the preaudit requirements for spending at the local level, and they are split in opinion as to whether expenditure ceilings have been applied either at state and local levels once budgets have been approved. As a general rule, community colleges sponsored by counties report fewer complications in this respect than those sponsored by school districts. The former typically negotiate a "target" budget figure with the county commissioners and encounter little difficulty if the budgets are kept within that parameter. Because the community colleges sponsored by school districts deal with several such units, establishment of a "target" for budgeting is more complex. In all cases, however, once budgets are approved, subsequent encroachment on college control of funds provided does not seem to present a problem in this state.

6. With regard to equity among local tax jurisdictions sponsoring the colleges, the presidents strongly believe that the current method discourages local tax bodies from exceeding the minimum level of support provided for in the statute, if the locality wishes to do so. On the other hand, the presidents strongly believe that their boards take into account the ability of the local sponsor to raise revenues when considering college budget requests. These generalized observations would appear to be logical consequences of the unit-rate funding method acting in combination with the budget development procedure just described. Knowing that a maximum state aid limit may be reached, local sponsors tend to keep their support to an equivalent or, if possible, lower level. Some state-level incentive to extend local effort or simply a larger state-level assumption of total support is indicated.

7. Specific questions as to accountability to local and state levels were not included in the survey of presidents, but this subject was planned to be handled inferentially from the others advanced. It seems clear that in Pennsylvania community colleges institutional accountability is largely at the local level. The current practices of a careful annual audit of FTE student enrollment for state reimbursement and of total expenditures for operating and capital costs appear to be satisfactory and sufficient, checks at the state level.

To summarize, it appears that presidents of Pennsylvania's community colleges generally are satisfied with the current method of state aid, but they

are dissatisfied with the current amount of state aid as a proportion of total college income. They feel strongly that the state should take a number of steps to improve support for (1) students residing outside the college district; (2) costs of new programs, new colleges, and state- or region-wide programs; (3) occupational programs in health and engineering; (4) minimum foundation levels of educational quality.

State Education Department Officials

Several officials in the Pennsylvania State Education Department were also interviewed by telephone to ascertain views at that level on community college funding procedures as currently operating. The general view held is quite consistent on the whole with that expressed by the community college presidents. As would be expected, however, the state-level officials suggest a broader concern about the level of funding, indicating that all of the several educational sectors need attention in this regard. Within this emphasis, however, the general view is that community colleges, in particular, need more state help.

There were several points where agreement with the presidents was quite strong. Included are the inequities of access to community college students residing outside the sponsorship area of the college offering the program desired; relatively low support to community programs, particularly those that must draw students regionally or statewide in order to reach viable enrollment levels and that are simultaneously generally recognized as needed in the state.

A point made in the comments of state officials and equally stressed but with slightly different implications in the observations of the presidents merits more specific notice here. The point concerns the impact of monies provided to needy students to attend college by the Pennsylvania Higher Education Assistance Agency (PHEAA).

PHEAA Support

Earlier in this paper it was noted that the financing of Pennsylvania community colleges relies more heavily on tuition than is true in most other states. It was also noted that in some states the burden that tuition might impose on students is offset by the provision of special state financial aid to students who need it. This service in Pennsylvania is provided by the Pennsylvania Higher Education Assistance Agency (PHEAA).

For several reasons, it is important in this paper to examine the extent to which PHEAA support to students becomes an indirect means of providing state fiscal assistance to community colleges. One reason is that the unit-rate formula for general funding of community colleges is "enrollment driven"; that is, when tuition is not offset by accessible student financial aid, enrollments maybe affected, and the impact on available operating funds is obvious. Another reason is

that concern for the students bearing an inequitable share of the costs of their education (a basic part of community college educational philosophy) is lessened when public monies are available to offset the costs, at least for the needy.

Upon closer examination, PHEAA support does not seem sufficient to establish a positive position on either of the two points just made: the money coming to community colleges through these channels is not a significant part of total available funds, nor is it eradicating the concern about "price to students," which inhibits their access to community colleges. These conclusions are supported by facts from the most recent complete annual PHEAA report (1974-75); of a total of $63.7 million awards to students attending college in Pennsylvania, $2.8 million (less than 5 percent) went to community college students. This amount was about 4 percent of total net operating costs for community colleges in 1974-75 ($67.6 million). The average grant to students in Pennsylvania was $699; to community college students in the Commonwealth, $383. Community colleges received only 7.7 percent of the PHEAA awards that year. So only 8,717 of the 54,558 state-audited reimbursable FTE students in community colleges received awards, even though on a head-count basis, the enrollment approached twice that figure.

A partial explanation of the relatively low level of support to community college students reflected in the above figures is that PHEAA policy currently allows for only partial costs of attending (only tuition); and even in this policy an important fact about many community college students is disregarded. Many students who live outside the sponsor (district) of a community college must pay a double tuition (the indistrict amount and that covering an amount roughly equal to local sponsor support to the college on a per student basis). In Pennsylvania, there is no "charge back" of costs to the nondistrict students' localities of residence such as exists in New York or New Jersey. PHEAA allows only one tuition payment in figuring student costs.

During the past year, PHEAA has exerted a strong effort to mesh its student support programs with those available from federal programs. Only partial reports are available on the success of this effort to date; they do not indicate, however, that the conclusions suggested above and their implications for financing the community colleges merit reexamination. "Price to student" remains a real and valid consideration in community college financing and requires serious attention and weight in evaluating current and proposed funding arrangements.

Summary

This section showed that Pennsylvania shares in the strenghts and weaknesses of the unit-rate method of funding. Unit-rate funding by the state is consistent with efforts to maintain a strong local voice in college governance. But unit-rate funding has some inherent weaknesses, including minimal safeguards of

program quality (a weakness, to be sure, shared by all the funding methods), a lack of equity among the taxing jurisdictions, and limited potential for accountability to the state.

A comparison of funding in Pennsylvania, as measured against other comparable states, shows that tuitions in Pennsylvania community colleges are high. Further, Pennsylvania ranks relatively low in the proportion of support to community colleges coming from local tax jurisdictions. Also state appropriations are relatively low in Pennsylvania. Thus it appears that Pennsylvania taxpayers have shifted a relatively high proportion of the burden of paying for community colleges onto the shoulders of the students who attend. The PHEAA program doubtless helps to provide some equity; nevertheless, it leaves serious questions of whether PHEAA support helps significantly to finance these colleges. Another important question is the adequacy of such support to meet the demands placed on the community colleges by their students. The larger question then becomes whether high tuitions in community colleges act as a disincentive to the very students the colleges were basically created to serve.

VI

ALTERNATIVES FOR FUNDING COMMUNITY COLLEGES IN PENNSYLVANIA

At least on a theoretical plane, a state considering reexamination of its method for financing community colleges has options as broad as the range of approaches discussed in Section III. As a practical matter, however, a state finds it necessary to build on foundations already laid. In several steps, this section provides a basis for considering modification of Pennsylvania's community college financing plan. First, the enrollment trends of the past five years and related costs of operation are described; next, enrollments and costs are projected into the future five years, using a number of assumptions for such projections; then, indications of the magnitude of the costs to the state, local sponsor, and student are shown, based on the current unit-rate funding approach and existing special environmental aid for students enrolled in occupational, non-liberal arts programs; and, finally, attention is called to the need to examine how the burden of costs will likely shift as modifications to the financing method are proposed.

Basic Projection of Enrollments and Costs*

Total reimbursable FTE enrollment trends of the past five years and projections to 1981-82 are presented in Table 3. Actual and projected operating costs are presented in Tables 4 and 5, respectively. They show (1) that reimbursable FTE enrollment increased by some 15,000 between 1971-72 and 1976-77 but is expected to continue to grow although less rapidly to about 76,150 in 1981-82 and (2) that, based on current per student costs of operation with no correction for inflation, operating costs are expected to increase from the current level of about $90.0 million to $111.3 million by 1981-82.

Special attention is called to the static cost per student when the results are converted to 1971-72 dollars. They reflect two striking facts: (1) the colleges' efforts to keep costs down, and (2) increases of about $320 per FTE are explained by inflation trends alone.

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* Important note: Throughout the following analysis, two important facts should be kept in mind: (1) that the current statutory limit of support in which the state participates by the basic aid formula is $1,500 per FTE student; costs above this level must be borne by the local sponsor; (2) the projections assume that the amounts of support from federal governmental sources will remain constant at the current level.

TABLE 3

TOTAL REIMBURSABLE FTES: ACTUAL FOR 1971-76 AND PROJECTED FOR 1977-82 IN PENNSYLVANIA COMMUNITY COLLEGES

Year	(1) Actual FTEs[a]	Year	(2) Projected FTEs[b]
1971-72	38,488	1977-78	65,740
1972-73	40,541	1978-79	68,343
1973-74	45,481	1979-80	70,946
1974-75	54,558	1980-81	73,548
1975-76	59,248	1981-82	76,150
1976-77	63,137[a]		

[a] Department of Education figures, 1971-72 through 1974-75, are state audited figures; 1975-76 has not been audited by the state but by an independent auditor. The 1976-77 figure is an estimated audited figure

[b] PACU 1976 Survey

TABLE 4

ACTUAL STATE TOTAL OPERATING COSTS AND COST PER FTE IN PENNSYLVANIA COMMUNITY COLLEGES, 1971-76

Year	(1) Actual Total Operating Cost (In Thousands $)	(2) Actual Cost Per FTE	(3) Actual Cost Per FTE (In 1971-72 dollars)
1971-72	42,044	1,092	1,092
1972-73	49,239	1,215	1,176
1973-74	56,482	1,242	1,132
1974-75	67,556	1,238	1,017
1975-76	78,409	1,323	996
1976-77[a]	89,521	1,418	1,013

Source: Department of Education

[a] Estimate

TABLE 5

PROJECTED STATE TOTAL OPERATING COSTS IN PENNSYLVANIA COMMUNITY COLLEGES, 1976-77 THROUGH 1981-82

Year	(1) Projected Total Reimbursable FTE	(2) Projected Cost Per FTE	(3) Projected Total Costs For Operations (Col. 1 x Col. 2, in thousands)
1976-77	63,137	1,418[a]	89,521
1977-78	65,740	1,461[b]	96,046
1978-79	68,343	1,461[c]	99,849
1979-80	70,946	1,461	103,652
1980-81	73,548	1,461	107,454
1981-82	76,150	1,461	111,255

[a] Figures 1976-77 budget

[b] Figures in actual 1977-78 budget request

c For years 1978-79 through 1981-82, a zero rate of inflation is assumed

Projection of State, Local, and Student Shares of Costs

How the expected growing costs of community college operations are likely to be shared by the state, local sponsors, and students is shown by the figures in Tables 6 through 12. Tables 6 and 7 assume zero inflation for the period indicated. This is unrealistic but it is used as a basic point of departure to establish that the average costs of the students (share borne by student tuition) on a per student basis would remain about constant (slightly under $500) in such calculations.

The impact of an assumed .05 annual inflation rate is shown in Tables 8, 9, and 10. Costs statewide would rise from $90.0 million to about $135.0 million by 1981-82. Under present financing procedures, this would generate increases of about $10.0 million to the state, $22.0 million to local sponsors, and about $13.5 million to students. *Any change in financing approach that shifts .01 of total costs from any one supporting source to another would mean a corresponding shift in the dollar burden from $960,000 in 1977-78 to $1.35 million in 1981-82.* A fact shown in Table 9 and repeated in Table 10 for emphasis is that because of inflation the students' share, on the average, would increase 20 percent in the next five years ($499 to $590) to maintain the students' proportion under current funding patterns.

The picture just described becomes even more dramatic, of course, if inflation were .10 during the next five years. The figures based on such an assumption are shown in Tables 11, 12, and 13. Under an inflation rate of .10, total costs would rise from about $90.0 million in 1976-77 to about $178.5 million in 1981-82; thus nearly double the dollar amount would be required to accomodate an increase of about a sixth in reimbursable FTE enrollment. Average costs to students on a per student basis (see also Table 13) would rise from the current approximate $500 to $781, or over 50 percent in five years. A shift in the funding pattern of .01 of total costs would require a relocation of nearly $1.0 million in 1977-78 and about $1.78 million in 1981-85.

Upward Trend in Tuition Charges

In the preceding discussion, attention was called several times to the dramatic rise in absolute dollars paid by students to finance community college education in Pennsylvania. In Tables 7, 10, and 13, the possible rise is shown to be from $499 in average dollar cost to student per student in 1976-77 to as much as $590 or $781 in 1981-82, depending on whether a .05 or .10 inflation rate per year is assumed. The costs to students per FTE student is calculated on actual audited costs borne by student charges divided by the full-time equivalent students served. Some readers may argue that this technique of showing the costs borne by students clouds the discussion because it is a calculated rather than actual figure even though the figure calculated is the actual portion of total operating costs met by tuition charges on students and the figures of total

TABLE 6

PROJECTED STATE, LOCAL, AND STUDENT SHARES OF COSTS FOR OPERATING PENNSYLVANIA COMMUNITY COLLEGES UNDER CURRENT LAW, ASSUMING ZERO INFLATION INCREASE

Year	(1) Projected Total Costs (From Table 5, in $ Thousands)	(2) Current Formula[a] State $	State %	Local $	Local %	Student $	Student %	(3) Average Dollar Cost to Students Per Student[d]	(4) .01 of Total Costs (In $ thousands)
1976-77[b]	89,521	32,532	36.3	25,502	28.6	31,487	35.1	499	895
1977-78[c]	96,046	34,119	35.5	28,311	29.5	33,616	35	511	960
1978-79	99,849	35,446	35.5	31,153	31.2	33,250	33.3	487	998
1979-80	103,652	36,796	35.5	32,340	31.2	34,516	33.3	487	1,037
1980-81	107,454	38,146	35.5	33,526	31.2	35,782	33.3	487	1,075
1981-82	111,255	39,496	35.5	34,711	31.2	37,048	33.3	487	1,113

[a] From 1974-75 audited figures, the state share was 37.4%; the student share, 33.6%; and the local sponsor share, 29%. The state share includes the basic 33⅓% plus the occupational stipend in Act 173

[b] Figures in 1976-77 budget

[c] Budget request figures for 1977-78

[d] Total costs to students (Col. 2) divided by total budgeted FTE (Col. 3, Table 3)

TABLE 7

AVERAGE DOLLAR COST PER STUDENT BASED ON REIMBURSABLE FTE, PROJECTED FROM 1976-77 THROUGH 1981-82

Year	(1) Projected Total Costs for Students (From Table 6, in $ Thousands)	(2) Average Dollar Cost Per Student
1976-77[a]	31,487	499
1977-78[b]	33,616	511
1978-79	33,250	487
1979-80	34,516	487
1980-81	35,782	487
1981-82	37,048	487

[a] Projected 1976-77 budget figures

[b] Figures from budget request for 1977-78

TABLE 8

PROJECTED STATE TOTAL OPERATING COSTS IN PENNSYLVANIA COMMUNITY COLLEGES, 1976-77 THROUGH 1981-82 WITH AN ANNUAL INFLATION FACTOR OF .05

Year	(1) Projected Total Reimbursable FTE	(2) Projected Cost $ Per FTE	(3) Projected Total Cost for Operations (Col. 1 x Col. 2, in $ thousands)
1976-77	63,137	1,418[b]	89,521[a]
1977-78	65,740	1,461[c]	96,046
1978-79	68,343	1,531[d]	104,633
1979-80	70,946	1,608	114,081
1980-81	73,548	1,688	124,149
1981-82	76,150	1,772	134,938

[a] Due to rounding off, Col. 1 x Col. 2 equals Col. 3 only for 1976-77

[b] Figures in 1976-77 budget

[c] Figures in 1977-78 budget request

[d] For years 1978-79 through 1981-82, a .05 annual rate of inflation per year based on actual cost for 1975-76 is assumed

TABLE 9

PROJECTED STATE, LOCAL, AND STUDENT SHARES OF COSTS FOR OPERATIONS IN PENNSYLVANIA COMMUNITY COLLEGES UNDER CURRENT LAW

Year	(1) Projected Total Costs (From Table 8, in $ thousands)	(2) Current Formula[a] State $	State %	Local $	Local %	Student $	Student %	(3) Average Dollar Cost to Students Per Student[d]	(4) .01 of Total Costs (in $ thousands)
1976-77[b]	89,521	32,532	36.3	25,502	28.6	31,487	35.1	499	895
1977-78[c]	96,046	34,119	35.5	28,311	29.5	33,616	35	511	960
1978-79	104,633	38,272	36.6	31,518	30.1	34,843	33.3	510	1046
1979-80	114,081	39,730	34.8	36,362	31.9	37,989	33.3	535	1141
1980-81	124,149	41,187	33.2	41,620	33.5	41,342	33.3	562	1241
1981-82	134,938	42,644	31.6	47,360	35.1	44,934	33.3	590	1349

[a] From 1974-75 audited figures, the state share was 37.4%; the student share, 33.6%; and the local sponsor share, 29%. The state share includes up to $500 per student plus the occupational stipend in Act 173

[b] Projected 1976-77 budget figures

[c] Budget request figures for 1977-78

[d] Total costs to students (Col. 2) divided by total budgeted FTE (Col. 3, Table 3)

TABLE 10

AVERAGE DOLLAR COST PER STUDENT BASED ON REIMBURSABLE FTE, PROJECTED FROM 1976-77 THROUGH 1981-82

Year	(1) Projected Total Costs for Students (From Table 9, in $ thousands)	(2) Average Dollar Cost Per Student
1976-77[a]	31,487	499
1977-78[b]	33,616	511
1978-79	34,843	510
1979-80	37,989	535
1980-81	41,342	562
1981-82	44,934	590

[a] Projected 1976-77 budget figures

[b] Figures from budget request for 1977-78

TABLE 11

PROJECTED STATE TOTAL OPERATING COSTS IN PENNSYLVANIA COMMUNITY COLLEGES, 1976-77 THROUGH 1981-82 WITH AN INFLATION FACTOR OF .10

Year	(1) Projected Total Reimbursable FTE	(2) Projected Cost $ Per FTE	(3) Projected Total Cost of Operations (Col. 1 x Col. 2, in $ thousands)
1976-77	63,137	1,418[a]	89,521
1977-78	65,740	1,461[b]	96,046
1978-79	68,343	1,761[c]	120,352
1979-80	70,946	1,937	137,422
1980-81	73,548	2,131	156,731
1981-82	76,150	2,344	178,496

[a] Figures in 1976-77 budget

[b] Figures in 1977-78 budget request

[c] For years 1978-79 through 1981-82, a .10 rate of inflation per year is assumed based on the actual cost for 1975-76

TABLE 12

PROJECTED STATE, LOCAL, AND STUDENT SHARES OF COSTS FOR OPERATIONS IN PENNSYLVANIA COMMUNITY COLLEGES UNDER CURRENT LAW

Year	(1) Projected Total Costs (From Table 11, in $ thousands)	(2) Current Formula[a] State $	State %	Local $	Local %	Student $	Student %	(3) Average Dollar Cost to Students Per Student[d]	(4) .01 of Total Costs (In $ thousands)
1976-77	89,521[b]	32,532	36.3	25,502	28.6	31,487	35.1	499	895
1977-78	96,046[c]	34,119	35.5	28,311	29.5	33,616	35	511	960
1978-79	120,352	38,272	31.8	42,003	34.9	40,077	33.3	586	1,204
1979-80	137,422	39,730	28.9	51,930	37.8	45,762	33.3	645	1,374
1980-81	156,731	41,187	26.3	63,353	40.4	52,191	33.3	710	1,567
1981-82	178,496	42,644	23.9	76,413	42.8	59,439	33.3	731	1,785

[a] From 1974-75 audited figures, the state share was 37.4%; the student share, 33.6%; and the local sponsor share, 29%. The state share includes the basic 33⅓% up to $500 per student plus the occupational stipend in Act 173

[b] Figures in 1976-77 budget

[c] Budget request figures for 1977-78

[d] Total costs to students (Col. 2) divided by total budgeted FTE (Col. 3, Table 3)

TABLE 13

AVERAGE DOLLAR COST PER STUDENT BASED ON REIMBURSABLE FTE, PROJECTED FROM 1976-77 THROUGH 1981-82

Year	(1) Projected Total Costs For Students (From Table 12, in $ thousands)	(2) Average Dollar Cost Per Student
1976-77[a]	31,487	499
1977-78[b]	33,616	511
1978-79	40,077	586
1979-80	45,762	645
1980-81	52,191	710
1981-82	59,439	781

[a] Projected 1976-77 budget figures

[b] Figures from budget request for 1977-78

statewide tuition collections and total costs come from annual audited community college financial reports. This statewide calculated figure, they may say, could be close to actual tuition charged students but not necessarily the same.

To resolve this possible question, recent past trends in average dollar costs to students per student (the figures shown in Tables 7, 10, and 13) were related to recent past trends in *actual* tuition charges in Pennsylvania community colleges. Further, to project this relationship five years ahead, the results of this analysis are shown in Tables 14 through 17. The first of these four tables shows the relationship between tuition actually charged resident in-district students in Pennsylvania community colleges (students from outside the district and the state are charged additional amounts) and the actual average dollar costs borne by the total FTE students enrolled. The figures show that tuition charges from a five-year historical view generally follow the average dollar costs of operations borne by students, and the gap in tuition costs that appeared during the middle years of the table appears adjusted in the last, with a consequent restoration of costs larger than tuition charges comparable to the condition shown in 1971-72.

On the assumption that community colleges will continue this effort to relate tuition income to cost of operation and that the level and regulation in Pennsylvania will permit this practice, past levels of relationship can be projected to future years. This is done in Tables 15, 16, and 17, again assuming zero, .05, and .10 rates of inflation. These observations of past practice and the assumption of their continued use in community colleges are consistent with the general community college practice and philosophic commitment to keep cost to students as low as possible.

That it will be increasingly difficult to continue honoring this commitment to keep dollar charges to students low is evident from the data in the last three tables. If recent relationships of tuition to costs continued to hold true, student tuition charges can be expected to rise from the 1975-76 level of $488 to over $600 or even over $800 by 1981-82, depending on the rate of inflation assumed. Whether or not the financial resources available to students typically attracted to Pennsylvania community colleges are sufficient to adjust to a 20 to 60 percent increase in charges over five years is a question of serious importance to the institutions concerned as well as to the individual students and their families.

Capital Cost Projections

Available information on capital costs is shown in Table 18. Since 1971-72, Pennsylvania needed over $110.0 million to finance capital needs in the community colleges. On an annual basis, an average of $370 per FTE enrollment has been provided for capital costs. Three factors will require continued attention to capital costs: (1) the relatively slight continued expansion in enrollments shown in Table 1; (2) the possible need for physical plant and equipment to house

TABLE 14

ACTUAL AVERAGE COST TO STUDENTS PER STUDENT AND ACTUAL STATEWIDE TUITION IN PENNSYLVANIA COMMUNITY COLLEGES, 1971-72 TO 1975-76

Year	Average $ Cost to Students Per Student[a]	Average Statewide Tuition Actually Charged Per Student[b] ($)
1971-72	393	371
1972-73	395	405
1973-74	409	438
1974-75	416	475
1975-76	498	488

[a] Total costs to students divided by total budgeted FTEs

[b] Pennsylvania Department of Education figures

TABLE 15

PROJECTED COSTS TO STUDENTS PER STUDENT AT PENNSYLVANIA COMMUNITY COLLEGES AND TUITION, ASSUMING ZERO INFLATION

Year	Average $ Cost to Students Per Student[a] (From Table 6)	Projected Statewide Tuition to be Charged Per Student ($)
1976-77[b]	499	484
1977-78[c]	511	509
1978-79	487	502
1979-80	487	502
1980-81	487	502
1981-82	487	502

[a] Total costs to students divided by total budgeted FTEs

[b] Figures in 1976-77 budget

[c] Projected 1977-78 budget figures

TABLE 16

PROJECTED COSTS TO STUDENTS PER STUDENT AT PENNSYLVANIA COMMUNITY COLLEGES AND TUITION, ASSUMING FIVE PERCENT INFLATION

Year	Average $ Cost to Students Per Student[a] (From Table 9)	Projected Statewide Tuition to be Charged Per Student ($)
1976-77[b]	499	484
1977-78[c]	511	509
1978-79	510	525
1979-80	535	551
1980-81	562	579
1981-82	590	608

[a] Total costs to students divided by total budgeted FTEs

[b] Projected 1976-77 budget figures

[c] Projected 1977-78 budget figures

TABLE 17

PROJECTED COSTS TO STUDENTS PER STUDENT AT PENNSYLVANIA COMMUNITY COLLEGES AND TUITION, ASSUMING TEN PERCENT INFLATION

Year	Average $ Cost to Students Per Student[a] (From Table 12)	Projected Statewide Tuition to be Charged Per Student ($)
1976-77[b]	499	484
1977-78[c]	511	509
1978-79	586	604
1979-80	645	664
1980-81	710	731
1981-82	781	804

[a] Total costs to students divided by total budgeted FTEs

[b] Figures in 1976-77 budget

[c] Projected 1977-78 budget figures

TABLE 18

TOTAL OF CAPITAL COSTS[a] FOR 1971-72 THROUGH 1976-77

Year	(1) Net Movable Equipment and Furnishings	(2) Net Sinking Fund and Debt Service and Rentals ($)	(3) Net Land and Buildings	(4) Capital Net Cost[b] Total (Col. 1 + Col. 2 + Col. 3) ($)	(5) Actual FTEs[d]	(6) Average Annual Outlay in $ Per FTE
1971-72	2,407	7,690	2,653	12,750	38,488	330
1972-73	2,918	9,272	2,781	14,971	40,541	370
1973-74	3,259	12,299	3,786	19,344	45,481	425
1974-75	3,429	13,014	4,634	21,077	54,558	386
1975-76				18,598	56,712	328
1976-77				24,720[c]	63,137	390

[a] All figures are in thousands

[b] Local sponsor pays 50% of all capital costs

[c] Budget figure for 1976-77

[d] From Table 3

new programs which cannot be accommodated by remodeling existing facilities; and (3) the need to replace obsolescent physical plant and equipment. Within the time and resources available for preparation of this paper, projection of the level of future capital costs was not possible. If an average of only $500 per *additional* student (the $370 average of the past five years and an annual inflation rate of less than .10) were made available to meet the capital needs suggested above, an additional outlay of about $6.5 million annually would be required by 1981-82 over the 1976-77 total amount of $63.1 million.

Alternative Methods of Funding

Attention is called again to the advantages of using the calculated effects in a shift of 1 percent of the projected total costs for community colleges from one source of support to another. The calculation can be helpful in judging the impact of possible changes in Pennsylvania's funding pattern. As an example, consider a change whereby: (1) the state would assume 45 percent of the total operating costs with no maximum, as opposed to the current 33-1/3 percent with up to $1500 per FTE, (an increase of 12-2/3 percent); (2) assume that this change would be applied to assist the student by reducing the student-tuition share of costs from the current statutory 33-1/3 percent to 27 percent (a decrease of 6-1/3 percent) and by reducing local sponsor costs from the current statutory 33-1/3 to 27 percent (a decrease of 6-1/3 percent). In both cases, such a change would be a real reduction, for as shown in Tables 9 and 12, the statutory 33-1/3 percent is actually operative for students but localities face serious percentage increases in the burden carried if no change occurs in the current law. A shift of 6.3 percent from student or local sources to state sources would mean a shift of about $8.5 million in 1981-82, if .05 inflation rate is assumed; $11.3 million, if .10 inflation rate is assumed.

Other, more speculative, alternatives are possible. If, for example, the state wished to move further into cost-based funding with incentive to colleges to enhance their community services, a factor could be established whereby the state would assume costs at the state level to support the college for that specific purpose. In a similar fashion, considerations to other desired academic outcomes could be built into the financing plan – for example, use of nontraditional modes of construction; designation of some programs to serve regional or statewide clienteles; or support for off-campus, satellite centers in places of business and industry. Depending on the percentage increase to be assumed, the resulting dollar amounts, with inflation accounted for, can be determined by reference to Tables 9 and 12.

The best example of cost-based funding is the newly developed program in Florida. The costs are computed in that program based on size (for 1977-78 twelve groups will be used), fixed and variable components of cost, federal funds available, ceilings on student fees, program differentials, changes in enrollment,

and other special considerations affecting costs. Funds are allocated to each institution based on data from that institution. Decisions about budget development, administration, and institutional resource allocation, however, are totally internal institutional actions. A fixed inflation factor is built into this plan.

The Florida approach to funding is built on an extensive statewide management information system and over ten years of analyzing differential costs of community college programs in the state. Pennsylvania would need to build a management information system before a cost-based program could be developed.

VII

CONCLUSION: FROM EVALUATION TO REEXAMINATION AND REVISION, WITH SOME COST/BENEFIT CONSIDERATIONS

Throughout this paper, the focus was on the general sensitivity among the several states to the timeliness and the need to reassess the approach used to finance community colleges. A means to do this was presented. This concluding section suggests that the procedure should be used to achieve targeted objectives whereby community college effectiveness can be increased. The evaluation process should help detect weaknesses as well as strengths in current statutes, policies, and procedures. When this is done, certain desired changed should be established and made targets of accomplishment by revisions in funding procedures. Some examples follow:

Targeted Change	Positive Action: Change Toward
1. To equalize local tax effort in support of community college	– a minimum foundation funding approach
2. To enhance mobility of students to enroll in programs offered only regionally	– cost-based funding and/or automatic "charge back" addition to unit-rate formula
3. To strenghten community service programs	– cost-based funding or categorical and increment in unit-rate approach

Cost/Benefit Considerations

Many different perspectives can be used to examine the cost/benefit relationships that are generated by changes in funding plans. Only one can be developed here, which will serve both to illustrate the cost/benefit concept and to advance a further conclusion. The proposition is that a continuation of the current reliance on student tuition charges in funding practices in most states, and in Pennsylvania, is likely to lead to negative cost/benefit outcomes; that is, the ultimate costs to the state will far exceed the benefits.

Under present funding procedures, students are expected to carry one-third of the operating costs of community colleges. As was shown above, such a plan, if continued, can be expected to generate tuition increases of 20 to 50 percent in the next five years. Such increases can prove disastrous to community college enrollments; many potential students either would decide not to attend any postsecondary educational institution or might attend four-year public or private colleges or other institutions.

According to the National Commission on Financing Postsecondary Education, a tuition increase of 1 percent in a college can be expected to reduce enrollments in the college by 1 to 3 percent.[8] If this conclusion is accurate, even at the 1 percent level, the increases in tuition shown above would mean that from one-fifth to one-half of the students now expected to be in community colleges in 1981-82 would not be there. This would be an estimated 30,000 to 75,000 students (based on 76,150 reimbursable FTE emanating from 4 head-count students—1 full-time and 3 part-time—to produce 2 FTE or a total head count of 152,000). In such an eventuality, the cost/benefit questions for serious consideration are: Do the tax supported sponsoring agencies (local and state) really end up saving money in such an event? Or, does the situation actually cause more total tax outlays by shifting students to other institutions, generating new programs at those colleges and possibly student financial aid; or, if the students do not go to college anywhere, putting a heavier burden on tax supported noneducational social services? In this paper, such questions can only be raised; other studies are needed to provide answers to them. The questions need to be asked, however, and the implications they hold for community college funding emphasized. Fair and full examination of them will help greatly to assure that wise decisions about changes in community college funding patterns will be reached.

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APPENDIX A

Members of Committee of Presidents who worked with Dr. Martorana on Finance Paper

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